APPLICANT: KENNETH T. HERUTH AND KEITH A. MIESEL TITLE: COLLECTING SLEEP QUALITY INFORMATION VIA A MEDICAL DEVICE ATTORNEY/AGENT: JASON D. KELLY
REG. NO. 54,213 TELEPHONE: 651.735.1100
DOCKET NO.: 1023-350US01 / P-20196.00 SHEET 1 OF 11 - 12 - 18 ~16B 16A 26 28 -22 30

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FIG. 1

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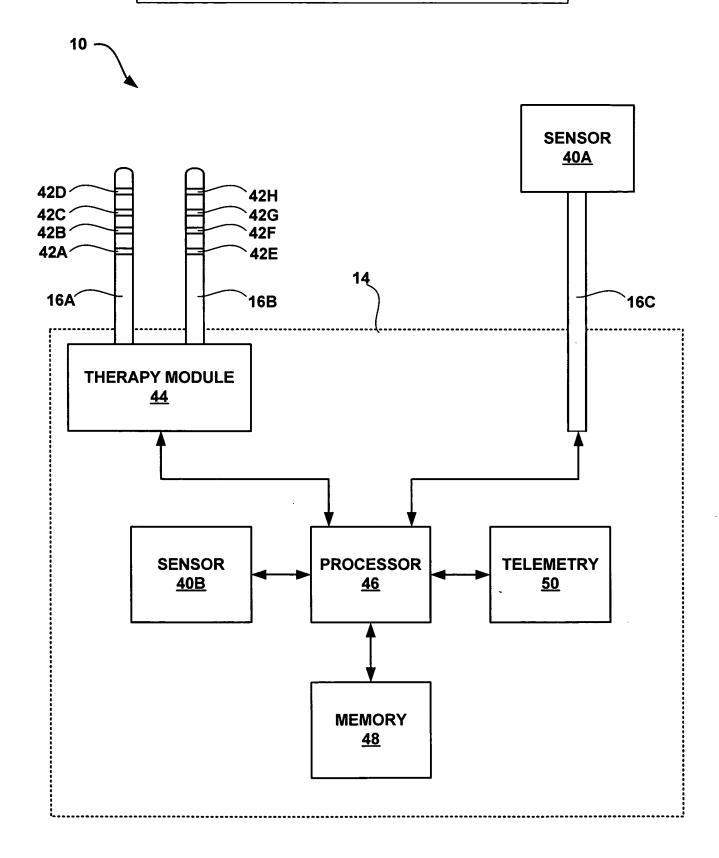


FIG. 2

TITLE: COLLECTING SLEEP QUALITY INFORMATION VIA A MEDICAL DEVICE

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SLEEP QUALITY METRIC VALUES THRESHOLDS PARAMETER DATA <u>62</u> 84 THERAPY
PARAMETER
SETS
60

FIG. 3

TITLE: COLLECTING SLEEP QUALITY INFORMATION VIA A MEDICAL DEVICE ATTORNEY/AGENT: JASON D. KELLY REG. NO. 54,213 TELEPHONE: 651.735.1100 DOCKET NO.: 1023-350US01 / P-20196.00 SHEET 4 OF 11 70 MONITOR POSTURE, ACTIVITY, MELATONIN AND/OR FOR PATIENT INDICATION NO **ATTEMPTING TO SLEEP?** YES IDENTIFY TIME THAT PATIENT BEGINS ATTEMPTING TO **SLEEP 76 MONITOR PHYSIOLOGICAL PARAMETERS** 78 NO **ASLEEP?** YES 80 **IDENTIFY TIME THAT PATIENT FALLS ASLEEP** 82 **MONITOR PHYSIOLOGICAL PARAMETERS** 84 IDENTIFY AROUSALS, APNEAS, AND TIME OF TRANSITIONS BETWEEN SLEEP STATES 86 NO **PATIENT AWAKE?** YES 88 **IDENTIFY TIME THAT PATIENT AWAKES**

DETERMINE SLEEP QUALITY METRIC VALUES

APPLICANT: KENNETH T. HERUTH AND KEITH A. MIESEL

FIG. 4

90

APPLICANT: KENNETH T. HERUTH AND KEITH A. MIESEL TITLE: COLLECTING SLEEP QUALITY INFORMATION VIA A MEDICAL DEVICE ATTORNEY/AGENT: JASON D. KELLY REG. NO. 54,213 TELEPHONE: 651.735.1100 DOCKET NO.: 1023-350US01 / P-20196.00

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100 **DETERMINE SLEEP QUALITY METRIC VALUE** 102 **IDENTIFY CURRENTLY SELECTED THERAPY** PARAMETER SET

-104

FIG. 5

UPDATE REPRESENTATIVE VALUE OF SLEEP QUALITY METRIC FOR THERAPY PARAMETER SET

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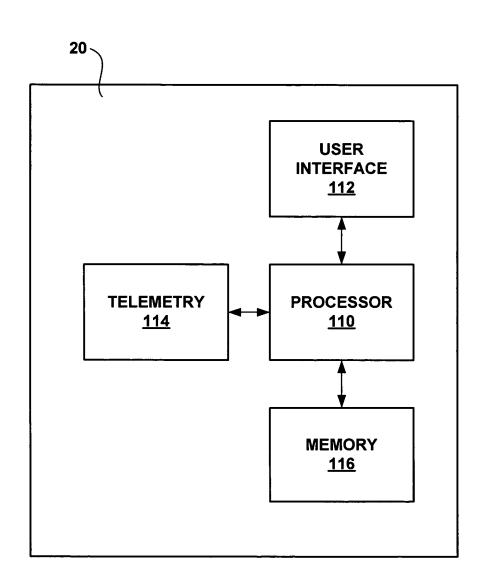


FIG. 6

TITLE: COLLECTING SLEEP QUALITY INFORMATION VIA A MEDICAL DEVICE

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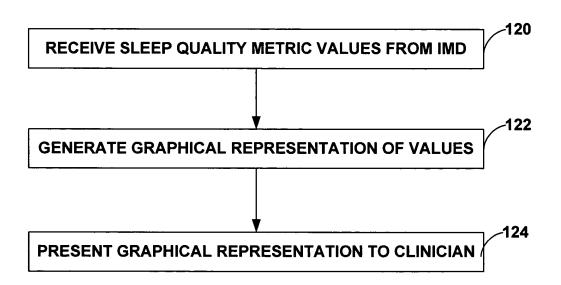


FIG. 7

TITLE: COLLECTING SLEEP QUALITY INFORMATION VIA A MEDICAL DEVICE

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DEEP SLEEP	4 hours	3.8 hours		3.0 hours
SLEEP LATENCY	20 min.	25 min.		38 min.
SLEEP EFFICIENCY	85%	75%		70%
PARAMETERS	PA = 5.5V PW = 210ms PR = 90Hz	PA = 5V PW = 190ms PR = 95Hz		PA = 4.6V PW = 215ms PR = 80Hz
PARAMETER SET	-	8	•••	Z

APPLICANT: KENNETH T. HERUTH AND KEITH A. MIESEL
TITLE: COLLECTING SLEEP QUALITY INFORMATION VIA A MEDICAL DEVICE
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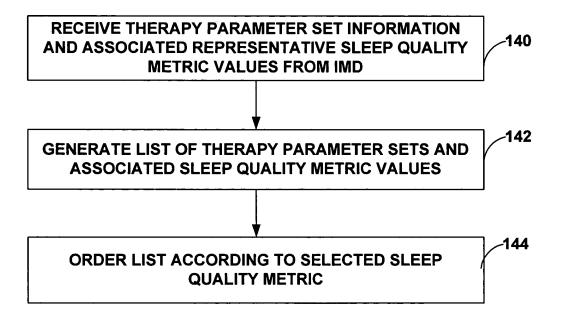


FIG. 9

TITLE: COLLECTING SLEEP QUALITY INFORMATION VIA A MEDICAL DEVICE

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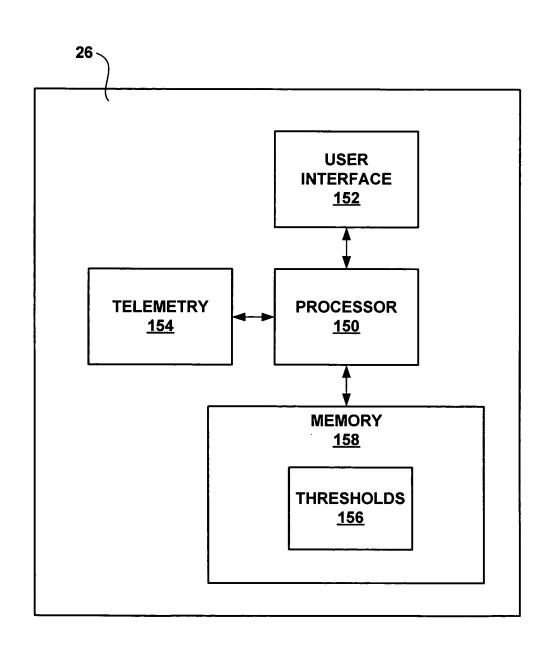


FIG. 10

TITLE: COLLECTING SLEEP QUALITY INFORMATION VIA A MEDICAL DEVICE

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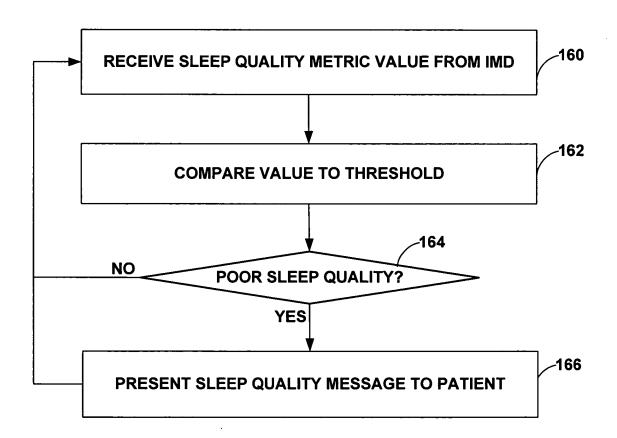


FIG. 11